



ICAO

International Civil Aviation Organization

**Ninth Meeting of the Common aeRonautical Virtual
Private Network Operations Group (CRV OG/9)**

Video Teleconference, 25 – 27 January 2022

Agenda Item 12: Review ToR and update Subject/Task list of CRV OG

**ACTION ITEM 7-8 CHARGING STRUCTURE FOR AN ANSP SERVICE PROVIDER ON
SURVEILLANCE**

(Presented by Australia, Fiji & PCCWG)

SUMMARY

This paper presents the procurement process for ANSP service provider to operate surveillance services like Space ADS-B over the CRV network.

1. INTRODUCTION

- 1.1 The paper presents the procurement process for ANSP that have implement CRV to add new GRE Tunnel for connection to Aireon LL for the provision of Space ADS-B services over the CRV network.
- 1.2 PNG & Aireon LL have commissioned the operation of the Space ADS-B in the PNG FIR in 2021 using the CRV network.

2. DISCUSSION

- 2.1 Based on CRV OG/7 meeting paper IP03, presented by PNG Air Services Limited and Aireon LLC for the use CRV for Space Based ADS-B, a number of participants asked for cost and benefit comparison between CRV and dedicated circuits used for delivery of spaced based ADS-B data.
- 2.2 Australia, Fiji and PCCWG were requested to develop a charging structure as soon as possible for an ANSP service provider to receive surveillance data so as to facilitate conducting CBA by ANSPs.
- 2.3 PCCWG has confirmed that there is no special charging structure for adding the Space Based ADS-B services and stated that for ANSP that have implemented CRV, there is no additional cost to setup the new GRE tunnel between CRV Users under the CRV network noting that Aireon LLC is already connected to the CRV. The standard GRE set up lead time is around 2-3 weeks after received CRV users' written confirmation.

- 2.4 However, CRV Users have to consider whether the CRV bandwidth is enough to do so (Assumed CRV users have no additional interface port requirement on NID). The additional bandwidth cost is provided the CRV Pricing Schedule in the CRV Common Packages.
- 2.5 For State that is planning to implement CRV and wishes to have a GRE tunnel for connection to Aireon LL for the provision of Space Based ADS-B services, they will need to specify this clearly in the System Engineering Plan (SEP) in the procurement of the required bandwidth from PCCWG to operate these services over the CRV network.
- 2.6 PCCWG has provided further clarity for State that wishes to “support additional like Space ADS-B services that will require connection to Aireon over the CRV network. The question of any additional charge on existing monthly charge can be answered in the two scenario and action below.

2.6.1 Scenario 1:

State is using 2MB Package C, currently using 1M, still have 1M bandwidth remain in the moment. (bandwidth requirement for ADSB will be advised by Aireon, if the ADSB bandwidth is less than 1Mb, than no immediate need for the package C 2M upgrade)

Action: The States and Aireon both need to submit request and technical design form to PCCWG. PCCWG will add the GRE tunnel for the State to connect without additional monthly cost if current package bandwidth is enough. Also, there are no one-time charge.

2.6.2 Scenario 2:

State is using 2M package C, but 2M are almost full.

State will need to upgrade package C from 2MB to higher bandwidth e.g. from 2MB to 3Mb. (the bandwidth should be decided by Aireon and the State subject to the subscription plan with Aireon)

Action: The State will communicate with PCCWG for an upgrade proposal from 2M to 3Mb. The impact of the cost to the State will be higher monthly rental charge (more bandwidth for ADSB is needed (same as additional voice or data service requirement)).

- 2.7 PCCWG has also confirmed that States that wishes to change their existing contractual agreement with PCCWG like upgrading the bandwidth as stated in Scenario 2 will require a new 5 year contract for Package C - 3MB will have to be signed.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
- a) note the information contained in this paper; and
 - b) discuss any relevant matter as appropriate
